WHAT IS CLAIMED IS:

1. A method comprising the steps of:

receiving a display data;

determining if a predetermined criteria is met by a first representation of the display data, wherein the first representation of the display data includes a first plurality of display streams to be transmitted to a second plurality of display devices;

compressing, in a first manner, a first display stream of the first plurality of display streams when it is determined that the first representation of the display data does not meet the predetermined criteria.

2. The method of claim 1, wherein the step of determining further includes providing the display streams to the second plurality of display devices using a common medium.

3. The method of claim 2, wherein the common medium is part of a local area network.

4. The method of claim 3, wherein a physical medium of the local area network includes cable.

5. The method of claim 3, wherein a physical medium of the local area network includes twisted pair wires.

6. The method of claim 3, wherein a physical medium of the local area network includes optical fiber.

7. The method of claim 3, wherein the common medium includes wireless Radio Frequency.

8. The method of claim 2, wherein the common medium is part of a wide area network.

9. The method of claim 1, wherein the predetermined criteria is determined to be met when it is expected that each display stream of the first plurality of display streams can be transmitted in a manner allowing for real time simultaneous display of each of the first plurality of display streams.

10. The method of claim 9, wherein the step of determining further includes:
determining if an actual transmission time of a frame of data for a first display stream of the plurality of display streams matches a first predicted transmission time.

11. The method of claim 10, wherein the step of determining further includes:
determining, for each display stream in the first plurality of display streams, whether an actual transmission time for a video frame matches a predicted transmission time within a predetermined tolerance.

12. The method of claim 9, wherein the step of determining further includes:
determining, for each display stream in the first plurality of display streams, whether an actual transmission time for a video frame matches a predicted transmission time.

13. The method of claim 1, wherein there is a one-to-one correspondence between display streams in the first plurality of display streams and display devices in the second plurality of display devices.

14. The method of claim 1, wherein there are fewer display streams in the first plurality of display streams than display devices in the second plurality of display devices, where at least one stream in the first plurality of display streams is shared by two or more display devices in the second plurality of display devices.

15. The method of claim 1, wherein the step of receiving further includes the display data being video data.

16. The method of claim 1, wherein the step of receiving further includes the display data being graphics data.

17. The method of claim 1, wherein the step of receiving further includes the display data being digital data.

18. The method of claim 1, wherein the step of receiving further includes the display data being analog data.

19. The method of claim 1, wherein the display data further includes display data from a plurality of sources.

20. The method of claim 1, wherein the step of receiving further includes receiving at least a portion of the display data from a digital data stream having a plurality of multiplexed channels.

21. The method of claim 20, wherein the digital data stream having a plurality of multiplexed channels is an MPEG data stream.

22. The method of claim 1, wherein the step of determining includes:

determining if the predetermined criteria is met when the first plurality of display streams is to be transmitted to the second plurality of display devices using a fixed bandwidth.

23. The method of claim 22, wherein the fixed bandwidth is the maximum bandwidth of the transmission medium.

24. The method of claim 22, wherein the fixed bandwidth is a predetermined portion of the available bandwidth of the transmission medium.

25. The method of claim 22, wherein the fixed bandwidth is the maximum bandwidth of a processing device that performs the step of compressing medium.

26. The method of claim 1 further comprising the step of:

selecting the first display steam from the first plurality of display streams using a predefined selection method.

27. The method of claim 26, wherein the predefined selection method includes using a round robin method.

28. The method of claim 26, wherein the predefined selection method includes selecting a display stream of the plurality of display streams having a greatest amount of data.

29. The method of claim 26, wherein the step of selecting is based on a prioritization of one or more of the display streams associated with the plurality of display streams.

30. The method of claim 26, wherein the step of selecting the first display stream is based upon a previous compression of a display stream in the first plurality of display streams.

31. The method of claim 1, wherein the step of compressing includes:

compressing in the first manner when it is determined the first display stream is has not been previously compressed;

compressing in a second manner when it is determined that the first display stream has been previously compressed in the first manner.

32. The method of claim 31, wherein the step of compressing further includes:

compressing in a third manner when it is determined that the first display stream has been previously compressed in the second manner.

33. A method comprising the steps of:

determining, for each display stream of a plurality of display streams, if an estimated transmit time meets an actual transmit time within a desired tolerance, if not, there is too much data being transmitted;

selecting a first stream of the plurality of display streams based on a prioritization method;

selecting one of a plurality of compression methods to be applied to the first stream;

repeating each of the above steps until the step of determining indicates the actual transmit time is within the desired tolerance of the estimated transmit time.

34. The method of claim 33, wherein the desired tolerance is based on a desired transmission rate to provide real time simultaneous display of each of the plurality of display streams.

35. The method of claim 33, wherein one of the plurality of compression methods includes reducing the precision of the first display stream.

36. The method of claim 33, wherein one of the plurality of compression methods includes reducing the resolution of the first display stream.

37. A method comprising the steps of:

receiving a multimedia data stream having a plurality of multimedia channels;

determining, for each multimedia channel in the multimedia data stream, whether an actual transmission time for a multimedia channel matches a predicted transmission time within a predetermined tolerance;

selecting, using a predefined selection method, a first multimedia channel;

reducing an amount of data to be transmitted associated with the first multimedia channel when it is determined actual transmission time of the first multimedia channel exceeds the predicted transmission time by an amount greater than the predetermined tolerance.

38. The method as in claim 37, wherein the predefined selection method includes a round robin method.

39. The method as in claim 37, wherein the step of reducing includes reducing the precision of the data transmitted by the first multimedia channel.

40. The method as in claim 37, wherein the step of reducing includes reducing the resolution of the data transmitted by the first multimedia channel.

41. The method as in claim 37, wherein the multimedia data stream includes MPEG data.

42. A system comprising:

a data processor;

memory operably coupled to said processor; and

a program of instructions capable of being stored in said memory and executed by said processor, said program of instruction to manipulate said processor to:

receive a display data;

determine if a predetermined criteria is met by a first representation of the display data, wherein the first representation of the display data includes a first plurality of display streams to be transmitted to a second plurality of display devices;

compress, in a first manner, a first display stream of the first plurality of display streams when it is determined that the first representation of the display data does not meet the predetermined criteria.

43. A computer readable medium tangibly embodying a program of instructions to manipulate a data processor to:

receive a display data;

determine if a predetermined criteria is met by a first representation of the display data, wherein the first representation of the display data includes a first plurality of display streams to be transmitted to a second plurality of display devices;

compress, in a first manner, a first display stream of the first plurality of display streams when it is determined that the first representation of the display data does not meet the predetermined criteria.